STANDARDS BULLETIN

January 2022

This Standards Bulletin from the Organization of Scientific Area Committees (OSAC) for Forensic Science provides a monthly update on:

- Standards moving through the OSAC Registry approval processes for published and OSAC Proposed Standards.
- Standards moving through the development process at standards developing organizations (SDOs).

Bulletin Summary:

- New standards added to the OSAC Registry: 0
- Standards under consideration for the Registry and open for comment: 10
- New SDO published standards: 10
- Standards open for comment at SDOs: 7

OSAC REGISTRY UPDATES

The OSAC Registry is a repository of high-quality, technically sound published and proposed standards for forensic science. These written documents define minimum requirements, best practices, standard protocols, and other guidance to help ensure that the results of forensic analyses are reliable and reproducible.

All the standards on the OSAC Registry have passed a rigorous technical and quality review by OSAC members, including forensic science practitioners, research scientists, statisticians, and legal experts.

Standards Open for Comment for OSAC Registry Approval

SDO Published Standards

The OSAC Registry approval process for published standards is used to review existing SDO published standards for technical quality and placement on the Registry. Please submit your comments by **11:59 p.m. ET on January 31, 2022** on whether the following SDO published standards should be included on the Registry.

Academy Standards Board (ASB):

- ANSI/ASB Best Practice Recommendation 008, *Mass Fatality Scene Processing: Best Practice Recommendations for the Medicolegal Authority*, First Edition, 2021. **Submit your comments** here**.**
- ANSI/ASB Standard 085, *Standard for Detection Canine Selection, Kenneling, and Healthcare*, First Edition, 2021. **Submit your comments** here**.**
- ANSI/ASB Standard 088, *General Guidelines for Training, Certification, and Documentation of Canine Detection Disciplines*, First Edition, 2020. **Submit your comments** here**.**
- ANSI/ASB Best Practice Recommendation 094, *Postmortem Impression Recovery: Guidance and Best Practices for Disaster Victim Identification*, First Edition, 2021. **Submit your comments** here**.**
- ANSI/ASB Standard 130, *Standard for Training in Forensic DNA Amplification Methods for Subsequent Capillary Electrophoresis Sequencing*, First Edition, 2021. **Submit your comments** here**.**
- ANSI/ASB Standard 131, *Standard for Training in Forensic DNA Sequencing Using Capillary Electrophoresis*, First Edition, 2021. **Submit your comments** here**.**
- ANSI/ASB Standard 140, *Standard for Training in Forensic Human Mitochondrial DNA Analysis, Interpretation, Comparison, Statistical Evaluation, and Reporting*, First Edition, 2021. **Submit your comments** here**.**

ASTM:

- ASTM E2451-21, *Standard Practice for Preserving Ignitable Liquids and Ignitable Liquid Residue Extracts from Fire Debris Samples*. **Submit your comments** here**.**

OSAC Proposed Standards

The OSAC Registry approval process for OSAC Proposed Standards is used to review OSAC drafted standards for technical quality and placement on the Registry. The following OSAC draft proposed standards are being considered for submission to an SDO. The final draft provided to the SDO will be available on the OSAC Registry as an "OSAC Proposed Standard."

OSAC welcomes comments on whether the current draft is suitable for release to the SDO as well as suggestions for improvements in content and wording. **To be considered, comments must be placed in the OSAC Comment Form and sent to comments@nist.gov by 11:59 p.m. ET on January 31, 2022.**

- OSAC 2022-N-0025, *Standard for Initial Response at Scenes by Scene Investigators*.
- OSAC 2022-S-0024, *Best Practice Recommendations for Evaluative Forensic DNA Testimony*.

NOTE: OSAC Resource Task Group (RTG) members are encouraged to comment on these standards by downloading the RTG Comment Table and submitting it to forensics@nist.gov in accordance with the Registry approval process.

Visit the OSAC website to see all the standards under consideration for the OSAC Registry, along with their status in the Registry approval process.

Is your organization implementing standards on the OSAC Registry?
Complete OSAC's Standards Implementation Declaration Form and send it to mark.stolorow@nist.gov to let us know.

SDO UPDATES

New SDO Published Standards

ASB

ASB published seven new standards in December 2021:

- ANSI/ASB Standard 024, *Standard for Training and Certification of Canine Detection of Humans: Location Check Using Pre-scented Canines*, First Edition, 2021. Initially drafted by OSAC's Dogs & Sensors Subcommittee and finalized by ASB's Dogs and Sensors Consensus Body, this new standard provides the requirements for pre-scented canine-location check search using a canine team to search for and identify a specific person's (target) scent at a given location. This standard promotes consistency across agencies, departments, and organizations utilizing pre-scented canines – location check search and provide the judicial system optimized protocol.
- ANSI/ASB Standard 026, *Standard for Training and Certification of Canine Detection of Humans: An Aged Trail Using Pre-scented Canines*, First Edition, 2021. Initially drafted by OSAC's Dogs & Sensors Subcommittee and finalized by ASB's Dogs and Sensors Consensus Body, this new standard provides the requirements for training, certification and documentation pertaining to pre-scented canine-aged track/trail search. Pre-scented canine aged trail searches use a canine team (canine and handler) to search for and follow aged trails of a specific person's (target) scent over different surface types. An aged track/trail is a human scent pathway that has been present for some period of time, typically expressed with a time frame associated with the track/trail (e.g., a 24 hour or older track/trail).

- ANSI/ASB Standard 027, *Standard for Training and Certification of Canine Detection of Humans: Patrol Canine Team*, First Edition, 2021. Initially drafted by OSAC's Dogs & Sensors Subcommittee and finalized by ASB's Dogs and Sensors Consensus Body, this new document provides standards for the training, certification, and documentation pertaining to canine teams (canine and handler) trained to search for specific person(s), location(s), and/or article(s) by starting from the last known position. This pertains to trails less than 24 hours old.
- ANSI/ASB Standard 092, *Standard for Training and Certification of Canine Detection of Explosives*, First Edition, 2021. Initially drafted by OSAC's Dogs & Sensors Subcommittee and finalized by ASB's Dogs and Sensors Consensus Body, this new standard provides the training requirements for a canine team (canine handler and canine), and details follow-on assessments for trained canine teams, in the field of explosives detection including traditional explosives detection canines (EDC), person screening canines (PSC), and explosives detection canines with person screening capabilities (EDC w/PSC). This standard is intended to be used as the basis for all phases of the training process and includes certification procedures, training and assessments, record keeping, and document management.
- ANSI/ASB Best Practice Recommendation 060, *Guidelines for Barrel and Overall Length Measurements of Firearms*, First Edition, 2021. Initially drafted by OSAC's Firearms & Toolmarks Subcommittee and finalized by ASB's Firearms and Toolmarks Consensus Body, this new document provides guidelines for measuring and reporting barrel length and overall length (BL-OL) of firearms, including guidelines for measurement traceability and estimating uncertainty of BL-OL measurements. This document does not apply to descriptive measurements of firearms.
- ANSI/ASB Best Practice Recommendation 108, *Forensic Odontology in Disaster Victim Identification: Best Practice Recommendations for the Medicolegal Authority*, First Edition, 2021. Initially drafted by OSAC's Medicolegal Death Investigation Subcommittee and finalized by ASB's Disaster Victim Identification Consensus Body, this new document provides best practices for the deployment of a forensic odontology team in a mass fatality incident. It delineates proper protocols, equipment, hardware, and software requirements, as well as command structure for the deployment of this team as part of the entire disaster victim identification operation.
- ANSI/ASB Standard 125, *Organizational and Foundational Standard for Medicolegal Death Investigation*, First Edition, 2021. Initially drafted by OSAC's Medicolegal Death Investigation Subcommittee and finalized by ASB's Medicolegal Death Investigation Consensus Body, this new standard outlines the minimum requirements, fundamental activities, general procedures, facilities, and personnel that are the basic components of a medicolegal death investigation system. This document provides an overarching description of educational frameworks, operational roles, and processes for the medicolegal death investigation system.

ASTM

ASTM published three new standards in November and December 2021:

- ANSI/ASTM E3253-21, *Practice for Establishing an Examination Scheme for Intact Explosives*. This new standard, initially drafted by OSAC's Ignitable Liquids, Explosives, & Gunshot Residue Subcommittee, was finalized and published by ASTM in November 2021. This practice covers the evaluation, selection, and application of techniques to establish examination schemes for use by forensic explosives examiners to identify intact (unexploded) low and high explosives.
- ASTM E2489-21, *Standard Practice for Statistical Analysis of One-Sample and Two-Sample Interlaboratory Proficiency Testing Programs* was revised by ASTM on December 22, 2021. Developed by ASTM Committee E20 on Temperature Measurement, this practice describes

methods for the statistical analysis of laboratory results obtained from interlaboratory proficiency testing programs. The methods provide direction for assessing and categorizing the performance of individual laboratories based on the relative likelihood of occurrence of their test results, and for determining estimates of testing variation associated with repeatability and reproducibility.

- ASTM E691-21, *Standard Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method* was updated by ASTM on December 22, 2021. Developed by ASTM Committee E20 on Temperature Measurement, this practice describes the techniques for planning, conducting, analyzing, and treating the results of an interlaboratory study (ILS) of a test method. The statistical techniques described in this practice provide adequate information for formulating the precision statement of a test method. This practice is also concerned exclusively with test methods which yield a single numerical figure as the test result, although the single figure may be the outcome of a calculation from a set of measurements.

Standards Open for Comment at SDOs

For a full list of forensic science standards that are currently open for comment at SDOs (7) and how to submit your feedback, visit OSAC's Standards Open for Comment webpage. This page consolidates and tracks comment deadlines for you and will be updated on a weekly basis.

OTHER NEWS

Other Forensic Science News, Events & Training

AAFS 2022 Annual Scientific Conference

The American Academy of Forensic Sciences (AAFS) 74th Annual Scientific Conference will be held February 21-25 in Seattle, WA. AAFS 2022 will be a hybrid event, offering both in-person and virtual attendance options, and registration is now open. Visit the AAFS website for ongoing updates about the meeting.

Center for Statistics and Application in Forensic Evidence

The Center for Statistics and Applications in Forensic Evidence (CSAFE) is offering the following webinar. Learn more and register.

- Improving Forensic Decision Making: A Human-Cognitive Perspective | February 17, 2022 | 12:00 – 1:00 p.m. CST

Forensic Technology Center of Excellence

NIJ's Forensic Technology Center of Excellence (FTCoE) will be delivering a virtual **Firearm and Toolmarks Policy and Practice Forum on January 11-14, 2022** that will explore new developments, discuss the foundations of firearm and toolmark examination, and address the implementation of new

technologies into workflows. Leading up to the forum, FTCoE is hosting a firearm and toolmarks webinar series to jump-start the discussion.

Learn more about these events at https://forensiccoe.org/2022-firearm-toolmarks-forum/.

National Institute of Justice

Subscribe to the National Institute of Justice's (NIJ) forensic list to see the latest NIJ awards, solicitations, events, and publications.